

L4 ANSWER 28 OF 34 USPATFULL on STN

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TITLE: Dioxetane-precursor-labeled probes and detection assays employing the same

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Probes labeled with 1,2-dioxetane precursors can be employed in a variety of assays. The probes may be nucleic acid, peptide nucleic acid, proteins including enzyme, antibody or antigen, steroid, carbohydrate, drug or non-drug hapten. The probe is provided with a 1,2-dioxetane precursor bound thereto, generally either covalently, or a strong ligand bond. The dioxetane precursor moiety is converted to a bound 1,2-dioxetane by exposure to singlet oxygen. These dioxetane (labels) either spontaneously decompose, or are induced to decompose by an appropriate trigger to release light. The trigger may be a change in pH temperature, or an agent which removes a protective group. Assay formats in which these 1,2-dioxetane labeled probes and referents may be used to include hybridization assays, immuno assays, gel-based assays and Capillary Zone Electrophoresis.

DETD A **sandwich** immunoassay can also be designed with photosensitizing dye **labeled capture antibody** immobilized on a solid phase. After incubation with an antigen containing sample and a dioxetane labeled detector antibody, the sample. . .

DETD A Quantitative **Sandwich** Immunoassay Using Dioxetane Precursor Labeled Detection Antibodies and Sensitizer Dye **Labeled Capture Antibodies**